

# Reply: New Insight Into the Cardiovascular Prognostic Importance of Endocan

Angiology  
2019, Vol. 70(7) 671  
© The Author(s) 2019  
Article reuse guidelines:  
[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)  
DOI: [10.1177/0003319719845961](https://doi.org/10.1177/0003319719845961)  
[journals.sagepub.com/home/ang](https://journals.sagepub.com/home/ang)



Mustafa Çelik, MD<sup>1</sup>, Erdoğan Sökmen, MD<sup>1</sup>, Serkan Sivri, MD<sup>1</sup>, and Murat Erer, MD<sup>1</sup>

We thank Akboga and Akboga<sup>1</sup> for their comments on our article.<sup>2</sup> Our primary aim was to provide a preliminary data regarding serum endocan level in essential hypertension (EH) patients compared with healthy normotensive participants. The reason that serum endocan level did not correlate with the 3 aortic elasticity parameters could be attributed to the relatively low number of participants in stage 1 ( $n = 35$ ) and 2 ( $n = 32$ ) EH groups. When taking a close look at the 3 aortic elasticity parameters, there is no significant difference with regard to the aortic strain and aortic stiffness index; only aortic distensibility differed between the 2 EH groups ( $P = .003$ ).

As mentioned in the study limitations, we solely relied upon repeated office blood pressure (BP) measurements instead of ambulatory BP monitoring. This may have also affected the true distribution of stage 1 and 2 EH groups and hence the correlation between the aortic elasticity parameters and serum endocan level.

We did not seek to correlate such other inflammatory biomarkers as C-reactive protein, high-sensitivity C-reactive protein, platelet to lymphocyte ratio, neutrophil to lymphocyte ratio, and monocyte to high-density lipoprotein cholesterol. This is a study limitation, although this was not mentioned in the discussion section.

Overall, it is well known from previous studies that hypertension impairs arterial elasticity,<sup>3–5</sup> and presence of a significant correlation between serum endocan level and 2 of 3 aortic elasticity, namely aortic strain and aortic distensibility, may

prove a crude surrogate marker of impaired aortic elasticity in the setting of EH.

## ORCID iD

Mustafa Çelik <https://orcid.org/0000-0003-4102-1564>  
Erdoğan Sökmen <https://orcid.org/0000-0002-8170-5912>  
Serkan Sivri <https://orcid.org/0000-0001-8995-0480>

## References

1. Akboga MK, Akboga YE. Endocan at the crossroads: a vascular protective molecule or inflammatory marker? *Angiology*. 2019; 70(7):669–70.
2. Çelik M, Sökmen E, Sivri S, Uçar C, Nar R, Erer M. The relationship between serum endocan level and aortic elastic properties in patients with newly diagnosed essential hypertension. *Angiology*. 2019;70(7):662–8.
3. Laurent S, Boutouyrie P, Asmar R, et al. Aortic stiffness is an independent predictor of all-cause and cardiovascular mortality in hypertensive patients. *Hypertension*. 2001;37:1236–41.
4. Paini A, Boutouyrie P, Calvet D, Tropeano AI, Laloux B, Laurent S. Carotid and aortic stiffness: determinants of discrepancies. *Hypertension*. 2006;47:371–6.
5. Yayla KG, Canpolat U, Yayla Ç, et al. A novel marker of impaired aortic elasticity in never treated hypertensive patients: monocyte/high-density lipoprotein cholesterol ratio. *Acta Cardiol Sin*. 2017; 33:41–9.

<sup>1</sup> Department of Cardiology, Ahi Evran University, Training and Research Hospital, Kirsehir, Turkey

## Corresponding Author:

Mustafa Çelik, Department of Cardiology, Ahi Evran University, Training and Research Hospital, Kervansaray Mah. 2019. Sok. No:1, 40100 Kirsehir, Turkey.  
Email: [muscelik50@gmail.com](mailto:muscelik50@gmail.com)